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ABSTRACT

This paper presents a study designed to determine whether or not parents' attitudes and children's intelligence scores affect children's reactions to television programs. Preschool children's behavior before, during, and after the viewing of two half-hour television programs, "Sesame Street" and "Polka Dot Door," was compared. The children, ranging in age from 3 years, 6 months to 5 years, 2 months, were each randomly assigned to a "Polka Dot Door" group or a "Sesame Street" group. Questionnaires were used to obtain parents' attitudes toward five preschool television programs, and Peabody Picture Vocabulary Test (PPVT) scores measured the children's intelligence. Results indicated that: (1) the effect of television was significant and creates a more parallel pattern across behaviors in the case of "Sesame Street"; (2) parents' positive attitudes toward television do not correlate significantly with children's overt reactions; and (3) the theory that the more intelligent the child, the more quantitatively he will react to the television was accepted for "Sesame Street" but rejected for "Polka Dot Door." A review of the literature accompanies the report. Appendixes make up one-quarter of the document. (CS)

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STUDY OF
THE EFFECTS OF "SESAME STREET"
AND "POLKA DOT DOOR" ON
PRESCHOOL CHILDREN

by
Laurie A. Ball

Assignment Presented for the Course: 21-491
Research in Child Studies
For Prof. Linda Masters
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CHAPTER I

THE PROBLEM AND ITS IMPORTANCE

In 1966, when Joan Ganz Cooney first reported on "The Potential Uses of Television in Preschool Education" she quoted Schramm and his associates who had studied the effects of television on school-aged children:

"...We should expect that the greatest amount of learning from television would take place in the early years of a child's use of it. The ages from three to eight, let us say, would be the time when television would have the least competition. The child's slate is relatively clean. Almost any experience is new to him and therefore absorbing. And television, as we know, has an enormous power to absorb the attention of a young child. After the child starts school, television has greater competition for attention and interest. But in the years before a child starts to read, when his horizon is still narrow and his curiosity boundless, when almost everything beyond his home and his little family circle is new--that is the time when television has a unique opportunity to contribute information and vocabulary skill." (p.12)

Since the time that Schramm and his associates carried out their studies on television and school-aged children, and the time that Cooney wrote her report to the Carnegie Corporation, a great deal of research has been done to assess the effects of television programs on preschool children. In analysing reactions of, and learning from, television programs specifically designed for three-to-five-year-olds, tests have been developed to compare children's attention to the screen, comprehension before and after viewing, and reactions during programs.

Little research actually seems to investigate how

children perceive and use concepts presented on television. Schramm may be interpreted as saying that the preschool child is, in view of his relative inexperience, a captive audience. Can it be inferred from this that the child would be able to learn the most from television at this time? Is it possible that the child with his inexperience can comprehend the speech, relate to broadcasters, and integrate television presentations with his limited view of the world?

Because it is felt that children in the preschool years express thoughts and feelings, and experiment with roles, materials and their ideas through play, it may be possible to attempt to understand what children learn from television by looking at their behavior before, during and after a program. Learning theorists hypothesize that in order to learn, the subject needs to be able to accommodate his system to the new operation and needs at least to repeat overtly or symbolically the represented act. (Salomon, 1969). Thus if a child is learning a concept from television his attempts to act out the television representation may be more valid indications of his learning than tests given to determine which concepts the child knows before and after a television show. Children at different levels of concept formation may be familiar with some concepts that other children have not yet accommodated, thus play and behavior during and after the program may vary greatly between individuals. Using a very open-ended test of children's reactions to television may reveal that children are internalizing far different concepts than parents, teachers, producers or researchers have envisioned.

If, as Schramm suggests, the child's inexperience leads him to become absorbed with virtually anything on television,

would inattention to the screen be an indication that the child is familiar with the concept being presented? Or would his attention to the screen relate to his experience with television in "his home and his little family circle"? (Cooney, 1966)

Purpose

The purpose of this study was to compare preschool children's behavior before, during and after the viewing of two one-half hour television programs, "Sesame Street" and "Polka Dot Door". Using questionnaires to obtain parents' attitudes to five preschool television programs, and Feabody Picture Vocabulary Test scores of the children's intelligence, an attempt was made to determine whether or not parents' attitudes and children's intelligence affect children's reactions to television programs.

Hypotheses

1. Children exposed to a television presentation will demonstrate altered frequency of (a) their individual behavior, both verbal and non-verbal, (b) their interaction with other children and (c) their interaction with teachers, in an attempt to experience and understand the television presentations.
2. The more positive the parents' attitudes are toward television, the more quantitatively the child will react to the shows presented.
3. The more intelligent the child is, the more quantitatively he will react to the shows presented.

CHAPTER II

RELATED LITERATURE

"Time is given man by life. But to live is to exchange this time for as much experience as it can buy. Television, using simultaneously at least two forms of time--the one that at the speed of light immediately changes reality into an image, and the one that unrolls a story at its own pace and the pace of speech--television is telling man that he may now, by his genius and knowhow, act upon the transformations and provide perhaps an economy for the exchange of time into experience from the present randomness to an understanding that is true to reality." (p.19)

-Caleb Gattengo

The Television Medium

Marshall McLuhan's stand that television is definitely not a passive medium (Rosen, 1967) may appear to be ludicrous until one actually considers the processes involved in television viewing. All of the senses are called upon in fusing sound, picture and tactility of the image into a coherent and meaningful piece of information. Of the three million dots per second that the T.V. image offers, each viewer selects only a dozen, closing the spaces between them in his mind. (Gilliom and Zimmer, 1972). Therefore, viewing television demands involvement and participation of a complex neurological nature. The conception of television as a passive medium is changing with more and more evidence of preschoolers' vocabulary build-up through television, viewing children in remote areas with wider interests than children not exposed to television, and beliefs of some librarians that television piques a child's curiosity to look things up in more detail. (Morris, 1971). However, these indications of

learning from television do not tell us what learning processes, or what role individual differences may play in the effectiveness of this learning.

Kaugman and Hartley (1970) set about to investigate the differences between active and passive learning and to explore the implications of these differences with respect to television. They emphasize that active learning is more noticeable because it involves motivation, practise, achievement and new skills or insights as a result of it. These attributes enable active learning to be measured both qualitatively and quantitatively through verbal, comprehension, recall and attitude tests as well as interview techniques. By definition passively learned material is almost unrelated to immediate needs or situations and is therefore difficult to research to determine conditions necessary for it to occur or to discover how it occurs. Krugman and Hartley (1970) suggest that using EEG techniques to record Alpha waves typical of relaxation, peacefulness and physical well-being, researchers may be able to investigate how much attention or arousal or interest is required to learn various tasks from television and from instructors. An inherent advantage to passive learning is the absense of aroused resistance to what is being learned. This lack of conflict is not a property of the stimulus, but of the learner and is perhaps a clue to the effectiveness of the education-through-entertainment approach of "Sesame Street".

"Sesame Street"

The recent upsurge of interest in the preschool years led to a study in 1966 by Joan Ganz Cooney to examine the potential uses of television for preschool education. With research showing that half of the child's growth in

intelligence has occurred by the time he reaches four years of age, hypothesizes that the achievement gap between disadvantaged and middle-class children could be narrowed by injecting intellectual stimulation into the early years and the prohibitive cost of putting 12 million preschoolers in classrooms, the television seemed a feasible way to reach and teach preschoolers (Cooney, 1970). The proposal of the Carnegie Corporation in launching "Sesame Street" involved combining entertainment with solid educational matter in an attempt to reach a lower as well as a middle-class audience. Experts were brought from a wide variety of fields to work on the educational content of the programs, research into viewing habits of children, and methods of evaluation to test program materials and insure that they were reaching and benefitting their audience. Instructional goals for "Sesame Street" were set in 1968 in three basic areas: 1) Symbolic representation involving letters, numbers, geometric forms; 2) Problem Solving and Reasoning, involving recognition of body parts, visual discrimination, and relational concepts; and 3) Natural Environment involving city and country, objects and people, family and home environment and simple rules of free play. Each one-hour program was to include material from each area with learning units in the form of stories, skits, games, songs and animation sequences. (Cooney, 1970).

From the time of its conception "Sesame Street" has attempted to provide a model, not only in the use of television to promote social, emotional and intellectual growth of young children, but also in Formative Research, involving evaluation of progress toward goals during program production, and Summative Research, involving follow-up testing to determine educational effects of various production techniques. The use of features of

program design as independent variables and learning and related outcomes as dependent variables has provided principles of presentational learning which may be generalizable to other televised presentations and other media. (Palmer, 1973)

For the purpose of providing Summative Data, Educational Testing Service developed tests to measure achievement in goal areas. (Reeves, 1970). The general technique of measurement consisted of three basic steps: 1) a graphic representation of one or more objects or events was presented to each child, 2) the representation was described to each child, and 3) the child was asked to respond verbally by pointing. (Ball and Bogaty, 1971), In the first year of "Sesame Street" results from 943 3, 4 and 5 year old children tested in inner city suburban, rural and Spanish-speaking areas of the United States indicated that learning was greater when skills were presented in direct fashion as opposed to indirect fashion, but that entertaining television was a very useful educational medium. (Ball and Bogaty, 1971). The similarity of scores of disadvantaged black children with disadvantaged white children at pretest, and similarity in gains made in relation to degree of viewing, seem to indicate that race is a relatively unimportant factor in determining the degree to which a child could learn from the show. (Ball and Bogaty, 1972). Rote learning of basic skills such as counting, learning names of letters and numbers and the higher cognitive activity areas such as sorting, classifying, pictorial representations and attitudinal areas indicated a marked effect due to the expansion of "Sesame Street's" educational goals in its second year. (Ball and Bogaty, 1972)

Since "Sesame Street" first reached audiences in 1969,

there has been a great increase in its distribution and in research and speculation on its effects. In a study conducted among primary pupils in Vancouver, Ellis et al (1972) found that regular viewers of "Sesame Street" in comparison with infrequent viewers had better knowledge and understanding of letters, words, numerals, quantities and shapes. Teachers interviewed reported that regular viewers had derived important benefits in terms of observational skills, more awareness of surroundings, broader interests and greater sensitivity and consideration for others. (Ellis et al., 1972). However, utilizing the Metropolitan Readiness Test, Hammer (1972) found that among Saskatoon Public School beginners, when "Sesame Street" was compared to socio-economic status and kindergarten attendance, "Sesame Street" was the least powerful contributor to improved school readiness scores. Children who had not experienced kindergarten gained more from the program than those who had experienced kindergarten, indicating that "Sesame Street" was a partial substitute for kindergarten, but only for "above the mean socio-economic status" children. (Hammer, 1972). Sprigle (1972) also utilized the Metropolitan Readiness Test on his sample of twenty-four matched pairs of poverty children in control and experimental groups, and determined that a "Sesame Street" curriculum in a kindergarten setting did not prepare poverty children for the work they had to do in first grade. His findings indicate that "Sesame Street" failed to narrow the achievement gap between disadvantaged and middle-class children. (Sprigle, 1972)

It is interesting to compare children's reactions to the "Sesame Street" program in countries outside North America. In Israel the show was broadcast twice a week for four months and studied to examine its educational

and psychological effects on 5-year olds and 7- and 8-year olds through use of cognitive tests, observations of viewing and controlled experiments. (Salomon, 1972). The older childrer middle-class children viewed and enjoyed it more and also comprehended it better. There were decreased enjoyment and viewing over time with greater differences for older and middle-class children than younger and lower SES children. Lower SES children at the kindergarten level gained more between pre-tests and post-tests than middle-class children.

There was much opposition to "Sesame Street" in Britain for several reasons: it utilizes didactic teaching methods considered to be unsuitable to teaching young children, it is too fast-paced for young children to grasp such difficult concepts, it attempts to "condition" the child by rote learning and it presents programs of a fragmented nature which encourages sporadic viewing or "passive box watching" rather than thoughtful involvement (Blackwell, 1972). However, Blackwell (1972) reports that practically all parents involved in the testing claimed that their children found it funny and enjoyable, and that it held the children's attention well and taught things useful in school.

In Briatin (Blackwell, 1972), Israel (Salomon, 1972), and the United States (Reeves, 1970), children's attention to "Sesame Street" was lowest during films and theme documentaries. Puppets, animated sections and alphabetical and number segments attracted the most involvement from children in each country. In Israel it was specifically noted that underlying all "boring" segments was stress on the verbal aspect while all "involving" segments had visual variability (Salomon, 1972). In the United States the commercials usually brought

attention level near maximum (Reeves, 1970). Perhaps high attention to commercials was not noted in either British or Israeli studies because of the less frequent use of commercials on their television networks and therefore "media illiteracy" (Salomon, 1972) with respect to this type of presentation.

Learning from Television in the Preschool Years

Salomon (1969) feels that it is important to focus media research on the interrelationship between how things are presented and how they are learned, rather than merely upon the immediate application of media techniques. He feels that we need to develop a cognitive-functionalistic view which makes reference to (a) covert processes such as adaptive actions upon objects or internalization of actions, and also refers to (b) the role of stimuli and responses in interaction between the learner and his environment (Salomon, 1969). Salomon sets out three orders of the stimuli dimension. The basic construction of the stimuli should provide answers to the general question of how much motor, observational, perceptual or conceptual activity is undertaken by the learner. The second stimuli dimension ought to answer how much specific mental activity results from exposure to a certain type of stimulus, by a specific learner. The third order of the stimulus dimension relates which mental operations are called for by different kinds of stimuli and which are prerequisite to extracting information from them. Integrating the theories of cognitive development of Bruner and Piaget and learning theorists, Salomon stresses that when a relatively new behavior is presented in an extremely overt manner, leaving no uncertainty or needs for accommodation, the presentation is less facilitating

than a less explicit presentation. The principles that (1) the learner has to use what he observes before he can integrate it and (2) he can do it only if underlying processes are involved and (3) that the learner needs at least to repeat overtly or symbollically the represented act (Salomon, 1969) are important to consider in relation to learning from television.

MAJOR PROGRAM ATTRIBUTES (Categories of Independent Variables)	VIEWER OUTCOMES (Dependent Variables)	PRINCIPLES OF PROGRAM DESIGN (Statements Linking Specific Independent and Dependent Variables)
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APPEAL

Visual orientation, attention, attitude, channel selection, etc.

Within each major attribute category any number of specific features may operate to affect viewer outcomes. Statements linking specific and well-defined program features to learning outcomes belong in this column.

COMPREHENSIBILITY

Comprehension

ACTIVITY ELICITING POTENTIAL

A. Potential to elicit Motor and Psychomotor Activity

Verbalization, gross physical acts, imitation, direction-following, etc.

.B. Potential to elicit Emotive Activity

Arousal, attitude, etc.

C. Potential to elicit Intellectual Activity

Synthesizing or integrating, forming concepts or principles, generalizing, comparing, evaluating, predicting, etc.

INTERNAL COMPATIBILITY OF ELEMENTS

Attention to signal vs. noise; integration of elements (visual-visual auditory-visual, auditory auditory); etc.

Fig. A - A model for research on presentational learning. Major attribute categories are very general dimensions of the televised presentation. Viewer outcomes represent the effects of the presentation on viewers. Within each attribute category, any number of specific program features (variables) may operate to affect viewer outcomes. Principles of program design are hypothesized or well validated relationships between scientific program features and specific viewer outcomes.

Palmer (1973) has prepared a model for research on presentational learning (see Figure A) which seems to focus on the application of stimuli but may provide clues of how to fit in the concentration on mediating cognitive variables Salomon proposes (Salomon, 1969).

In order to investigate the capability of a very young child to learn selected reading skills from television, a method of systematic reading instruction via closed circuit television at a rate of 15 to 20 minutes a week for 12 weeks was tested on two to four-year-old children (Dunn, 1970). The skills used were knowledge of the alphabet, alphabet sounds and basic vocabulary. Tests to determine knowledge of these skills were given to 90 children aged 2 to 4, selected from respondents to an invitation to appear on a local T.V. show. The experimental group, randomly selected from the 90 children, attended 12 weekly video-taped presentations with one parent. Parents of the experimental subjects were given a manual of activities which reinforced the presentations and were asked to use these ten minutes per day. Tests of knowledge of alphabet and alphabet sounds, a 22 word basic vocabulary, as well as PPVT comprised the pre and posttests given to control and experimental groups. T-tests were used to compare groups on gains made in reading skills over the four months and an analysis of variance was performed on selected demographic and personality data related to gains on selected reading skills. It was found that gains in selected reading skills by the experimental group were significantly better than the control group at the .001 level. Neither age nor verbal IQ showed a significant relationship to gain in skills, however, socio-economic level assessed by family income was found to have a significant relationship with gain in reading skills. The lowest SES group made the most gain. The study concludes

that children 2 through 4 years of age can be effectively taught reading skills via television (Dunn, 1970). These results might have been different if parents of the experimental group had not been involved in reinforcing television presentations. Palmer points out that when an adult is indifferent the child is likely to be inattentive whereas if the parent is enthusiastic, the child is likely to respond to encouragement to view (Hammer, 1972).

A three year project run by the Appalachia Educational Laboratory for 3, 4 and 5-year-old children to provide a viable alternative to kindergartens involves the use of a daily one-half hour television program "Around the Bend;" weekly visits in homes by paraprofessionals; and weekly visits by mobile classrooms (Miller, 1970). Instruction is assumed to be most effective when the learner is an active participant and the program is intended to encourage maximum child involvement in the television learning process. Home visitors tally whether the viewer responded verbally, non-verbally or not at all, to suggestions or questions, as well as indicating the proportion of the time that the viewer has his eyes on the set. Through evaluating the rating of particular programming techniques, it can be determined which types of questions are most effective in eliciting verbal responses, the optimum number of questions per unit of time, which activities elicit verbal and non-verbal indications of enthusiasm, types of music and songs which are most effective in getting viewers to sing and dance, what techniques are most likely to get viewers to repeat sounds of letters and learn cognitive skills, what camera techniques, methods of monologue and types of animation are best in eliciting the desired effect on the viewer, how long various activities should be and what

stories and presentations are most effective in maintaining interest. Age and sex differences were found in subjects' reactions. Four-year-olds were the most enthusiastic followed by the 3's, then 5's. Five-year-old males were found to be the least enthusiastic. Girls at all age levels responded overtly to questions, suggestions, and directions of the television teacher a greater proportion of the time than boys did (Miller, 1970). It seems however that this method of evaluating the effects of a television program may completely miss any passive learning of the viewers.

The Child's View of Television

Schramm and associates (1961) inferred from their study of older children and television that the child between the ages of three and eight would be the most influenced by television. Although more recent studies have attempted to measure the extent to which preschool children learn from television (Ball and Bogaty, 1971), (Miller, 1970), most research is based on older children's perceptions of programs. (Schram, Lyle and Parker, 1961), (Schramm, 1965), (Collins, 1973).

It is interesting to look at what children of different ages understand from television programming and how these differences in understanding and evaluating content of programs relate to social behavior after watching television (Collins, 1973). Third graders seem to remember only a small proportion of the information that adults consider essential to the retelling of the plot, however older children show progressive increases in ability to know what is important to the plot and to ignore non-essential information. Therefore, one may suppose that changes in aspects of memory, learning of task-relevant cues, and

improvement in selective attention are age related cognitive skills determining understanding and evaluation of program content. Kindergarten and Grade 2 children are significantly less likely than older children and adults to explain an aggressor's motives. The younger children rely simply on recounting an aggressor's action as a reason for their evaluations. This shift from consequences-based to motive-based evaluation of actions occurs around 9 or 10 years of age. This study is significant because it brings out the very different perceptions that children may use in viewing programs adults prepare for them.

Children usually begin watching television at the age of two to three with children's programs (Schramm, 1965). By the early elementary school years they view more adult programs than children's programs in every country where the choice is available and where children's television viewing has been studied. By the age of ten or eleven taste patterns are fairly well structured. Dr. Himmelweit in England studied children who lived where only one channel was available and children had only one choice available--to cease to view or to continue viewing a program they expected to find uninteresting. Often the children chose to see the program and then they became interested (Schramm, 1965). More investigation is necessary to determine television's effect on developing children's tastes.

The maximum psychological effect of television on children appears to occur when: (a) values or viewpoints appear in program after program; (b) the values evoke emotional reactions through a dramatic presentation; (c) values link with the child's present and immediate needs; (d) the viewer is uncritical of and attached to the medium; and (e) the viewer is not already supplied with a set of values which provide a standard in opposition to that offered on the television (Schramm, 1965).

These points are important to consider when evaluating young children's television. Many articles and guidelines have been concerned with the violent content of television and its psychological effect on young children. However, there is an increasing interest in programming psychologically positive content for young children. Newer programs emphasize content which will open up a child's curiosity through exploration of life in different environments, investigation of different physical properties of things, and emphasis on inter-relationships existing in the world (Pollak, 1970). Many people have reacted to the passive dullness of children's television created by the lack of sensitivity, respect and feeling for young children (Mukerji, 1969), (Barcus, 1971), (Johnson, 1971), (Committee on Children's Television, 1971 and 1972), (Sarason, 1971), (Williams, 1972), (Mundie, 1973). An increasing awareness of and demand for programs which engage young children in interaction hopefully will lead to a more imaginative and aesthetic use of the medium than was prevalent several years ago. (Mukerji, 1969)

Parents and Television

Parents have a very important function in television learning. In their relationship with their children parents are in a position to act as gatekeepers, allowing what they approve and barring what they do not. It is parents' attitudes towards and their comments about content on television that may mediate the projected messages' influences on young children. (Report to the Surgeon General, 1972). Not only does discussion about television programs become an aspect of the intra-family dynamics of our society, it may provide the child with appropriate frames of reference or direct interpretation

of the content of those programs (Lyle and Hoffman, 1971), thus influencing the psychological effect of television.

Proponents of early childhood education via television programs have recognized the role that parents encouragement may have in improving learning from the television medium. In one study, volunteer mothers from inner-city areas of Los Angeles and Chicago were trained to conduct "Sesame Street" viewing sessions in their own homes and to reinforce specific aspects of the program to the children's experiences (Felep, Millar and Gillette, 1971). The Appalachia Educational Laboratory's program, "Around the Bend" was also supplemented with home visits from paraprofessionals who encouraged parents to watch the programs with their children (Bettram, 1970). An analysis of responses of 44 mothers in the Greater Boston area indicated that various types of parental control were motivated by fears that a child might be adversely affected by premature exposure to the adult world and by the belief that television viewing is less important for the child than other activities (Barcus, 1969). Control varied in the time it was exercised, whether it was positive or negative, formal or informal and based on time or content limits.

Parents are presented with many difficulties in their attempts to control children's viewing. A study carried out in Japan indicated that the amount of time mothers spend viewing closely correlated with the amount of time that their children spent viewing irrespective of different characteristics of the children and parents attempts at imposed control (Radio and Television Culture Research Institute, 1971). In a study conducted in Metropolitan Chicago, fathers seemed to exert little control over televiewing and half of the mothers reported that their

child turned the set on and that he had no established time limitations on viewing (Hess and Gordon, 1962). It seems that even though mothers and fathers may express negative feelings about programs, in most cases the child exercises more control than parents over viewing time and selection of program content. However, a study done by Greenburg, Ericson and Vlahos (1971) which sought to study the extent of agreement between a mother and one of her children (Grade 4 or 5) on the children's television habits, indicated disagreement of reports on a great many of the measures. This raises doubts as to how valid the parents' interpretations of their children's learning, enjoyment or behavior as a result of television viewing may be.

Much of the research of the 1950's seemed to concentrate on television's effect on the child's social development especially with respect to passivity and escapism (Benson, 1958), (Maccoby, 1954). During the 1960's television began to be thought of as a potential tool for education due to its widespread use (Palmer, 1973), and its inherent ability to absorb the attention of viewers (Gilliom, 1972). The 1970's have brought strong reactions in the United States to mediocre programs which are poor in content and technical quality and which demonstrate lack of respect for children, racial groups and for modern sex roles in programming. The amount, quality and effectiveness of advertising on children has also generated concern (Barcus, 1971), (Johnson, 1971), (Williams, 1972), (Mundie, 1973). Perhaps as a result of criticism of children's television, work is being done to establish guidelines for television programs suited to children's specific needs and level of understanding (Garry, 1965), (Leon, 1970), (Mukerji, 1969).

It is essential that further investigations be carried out on the effects of television stimuli, as new uses and techniques are developed for television. More valuable and informative methods of evaluating program techniques and effects must be investigated since present tests especially of preschoolers' learning may not touch incidental or passive learning from the media of television, and reports of parents may not accurately indicate the child's understanding of what he has viewed. Before television can be used to its full potential for the benefit of children and society, awareness of the actual learning processes television demands of viewers must be developed.

CHAPTER III

METHOD AND PROCEDURE

After viewing various television programs designed specifically for preschool-aged children the two shows "Sesame Street" and "Polka Dot Door" were chosen because of the contrast in their format, length of sequences, and manner of appealing to children. "Sesame Street" presents a fast paced, short time sequence series of animations, films, puppet skits, and everyday situations involving people of various ages. "Polka Dot Door" on the other hand, focuses on a theme but presents variations on this theme in leisurely paced, adult directed activities such as art media, songs, films, stories and drama. The two shows were videotaped at random in early November (for an outline of programs see Appendix A).

Children from the Family Studies Preschool in the morning group and in the afternoon group were randomly divided into two groups. Thus the four groups formed were Morning "Sesame Street", Morning "Polka Dot Door", Afternoon "Sesame Street", and Afternoon "Polka Dot Door".

Observers were students from 2nd and 3rd year of the Child Studies program with training and experience in observing preschool children. Orientation and training for the observers consisted of viewing the two videotapes one week before the actual testing, in order to note program techniques and also one half-hour trial observations with the proposed experimental behavior checklist. The trial observations were performed in the observation booths of the Family Studies Preschool and involved three to ten observers and a time keeper. At the outset one of the children in the Preschool was selected and everyone kept a running record of his movements, verbalizations and

interactions for five minutes. The categories on the behavior checklists were then explained and the checklists were used for five minutes, with each behavior occurring in the thirty second interval being checked off. This procedure was repeated for a further five minutes and checklists were compared to determine whether the categories were being understood and used accurately. (see Appendix B and C for checklists and Graphs of Trial Observations).

Observers were randomly assigned to record the behavior of one child in the morning group on the testing day and one child in the afternoon group, and this information as well as a list of instructions, behavior categories and sample behavior checklist were mailed to the students one week before the test day. (see Appendix D). The two children assigned to each observer watched the same show, in the same room. One Time keeper in each Observation Booth during testing was instructed to keep a stopwatch running continuously for the full test hour and to indicate the end of each thirty second interval by saying the number of the segment concluding at the 120th segment.

Teachers in the Family Studies Preschool were assistants in this experiment and as well as receiving written and verbal instructions they discussed the experiment as a group to suggest ways of keeping conditions constant between morning and afternoon sessions, yet relating effectively to their unique classes of children (Appendix E: Instructions to Teachers).

Television monitors were set up in two rooms of the Preschool, with camera monitors on tripods behind and above them. The monitors were turned on and observations began ten minutes before the televisions were turned on, in order to obtain a baseline of the children's behavior. The televisions were then turned on and half an hour

later when the shows were over they were shut off, and the children helped place tables and chairs in the camera monitored area. Snack was served to the children, and camera monitors and observations continued for a further twenty minutes. Children were then prepared for outdoor play.

The teachers were asked to insure that children were taken to the rooms where their names were listed and if possible to keep children from leaving the room until the experiment was over. They were asked to be interested in the children's comments but not to express their own opinions on the programs. (Appendix E: Instructions to Teachers).

Parents of children in the Preschool were sent letters explaining the presence of the television in the Nursery School on the proposed day for the test. (Appendix F) They were also requested to complete the Survey of Parental Attitudes Toward Television, one by the mother and one by the father, and to return these in a stamped, addressed envelope. (Appendix G). The Survey of Parental Attitudes Toward Television was used with permission of Charles L. Bettram of Appalachia Educational Laboratory Inc. and the last five questions were added to the questionnaire by the researcher. (Appendix H).

Coding of Responses

The following are the behavior categories which observers were asked to record over 120 30-second time segments:

- 1) Verbal Enthusiasm includes laughing, singing or statements such as "I like this."
- 2) Non-Verbal Enthusiasm behavior such as smiling, moving to the music, etc.

3) Verbal Negative Response covers negative exclamations such as "I don't like this".

4) Non-Verbal Negative Response behavior such as frowning, crying, etc.

5) Interaction covers actions or conversations with others, either initiated by the child or the other person, child, or teacher.

CHAPTER IV

ANALYSIS OF DATA

Purpose

The purpose of this study was to compare preschool children's behavior before, during and after the viewing of two one-half-hour television programs "Sesame Street" and "Polka Dot Door". Using questionnaires to obtain parents' attitudes to five preschool television programs and Peabody Picture Vocabulary Test scores of the children's intelligence, an attempt was made to determine whether or not parents' attitudes and children's intelligence affect the children's reactions to television programs.

Subjects

The children the The Family Studies Preschool at the University of Guelph who ranged in age from 3 years, 6 months to 5 years, 2 months were employed as subjects in this experiment. The morning and the afternoon children were randomly assigned to a "Polka Dot Door" group or a "Sesame Street" group, with 16 subjects in the "Polka Dot Door" group and 19 subjects in the "Sesame Street" group.

Mothers and fathers of the preschool children in the study were asked to complete the Survey of Parental Attitudes Toward Television. A total of 73 questionnaires were sent out, of which 59 were returned.

Discussion of Tests

Mean scores for each of the six behaviors in the three conditions of Pre-Television, During Television and Post Television were calculated. These eighteen behavior per minute scores for each subject were then

used in the Treatments-by-Treatments-by-Subjects Design of the Analysis of Variance Test. The purpose of this test was to determine whether or not the television significantly effected scores, whether behaviors had significantly changed, and whether the effects of television and behavior interacted to a significant degree in the case of each program.

For "Polka Dot Door" and "Sesame Street" Pearson Product-Moment Correlations were performed using each subject's total of the eighteen behavior per minute scores. These scores were correlated with the total positive responses of the subject's father on the Survey of Parental Attitude Towards Television, and with the mother's total positive responses as well. The mother's and father's total positive responses on the survey were correlated using Pearson Product-Moment correlation.

The child's I.Q. score from the Peabody Picture Vocabulary Test was correlated with his total behavior score again using Pearson Product-Moment Correlation.

Tests of significance (t-tests) were performed on all correlations.

The data from each returned questionnaire was fed into a computer and percentage responses on each question for Mothers, Fathers and Total Population were recorded.

Summary of Findings

The Analysis of Variance for "Polka Dot Door" indicates that (1) television did not significantly effect results, (2) behavior was a significant factor, and (3) the effects of television and behavior interacted to a significant degree. (Table 1:1)

The Analysis of Variance for "Sesame Street" indicates that (1) television significantly effected results,

(2) behavior was a significant factor, and (3) television and behavior interacted to a significant degree. (Table 1:2)

In order to clarify the Analysis of Variance results, Graphs of the mean scores for each behavior have been compiled. (Figure 1 to Figure 6) In looking at these six graphs one notices that for "Sesame Street" the level of behavior frequency decreases "During Television" in all but the "Mean Non-Verbal Negative Scores". Thus in most cases the presence of the television significantly effects results. The graphs of behavior for "Polka Dot Door" subjects do not indicate any such trend, and the behavior graphs are very different from each other. In the case of both shows there are great differences between the three television conditions and behaviors overall.

Pearson Product-Moment Correlations show that there were no significant correlations between "Sesame Street" behavior score and father's positive feelings toward television, "Sesame Street" behavior scores and mother's positive feelings, "Polka Dot Door" behavior scores and father's positive feelings or "Polka Dot Door" behavior scores and mother's positive feelings. (Table 2:1)

Father's and Mother's positive responses on Survey of Parental Attitude Toward Television do correlate significantly. (Table 2:2)

For "Polka Dot Door" subjects, there was a low negative correlation between F.P.V.T. scores and behaviors scores, which was not significant. For "Sesame Street" subjects, there was a moderately high correlation which was significant. (Table 2:3)

TABLE 1:1 ANALYSIS OF VARIANCE FOR POLKA DOT DOOR

Source	ss	df	ms	F	P
Total	25.0599	287	-	-	-
Subjects	12.3654	15	-	-	-
Television	0.3696	2	0.1848	2.2238	n.s.
Behavior	7.1521	5	1.4304	8.2443	<.01
Television x Behav.	2.6502	10	0.2650	13.3838	<.01
Error Television	2.4936	30	0.0831	-	-
Error Behavior	13.0166	75	0.1735	-	-
Error Television x Behavior	2.9807	150	0.0198	-	-

TABLE 1:2 ANALYSIS OF VARIANCE FOR SESAME STREET

Source	ss	df	ms	F	P
Total	52.0001	341	-	-	-
Subjects	17.4495	18	-	-	-
Television	2.8222	2	1.4111	6.8433	<.01
Behavior	9.7044	5	1.9408	13.6772	<.01
Television x Behav.	2.0199	10	0.2020	4.2978	<.01
Error Television	7.4233	36	0.2026	-	-
Error Behavior	12.7779	90	0.1419	-	-
Error Television x Behavior	8.4637	180	0.0470	-	-

TABLE 2:1 PEARSON PRODUCT-MOMENT CORRELATIONS BETWEEN
(a) MOTHER'S AND (b) FATHER'S POSITIVE RESPONSES ON
SURVEY OF PARENTAL ATTITUDE TOWARD TELEVISION
AND QUANTITATIVE REACTIONS OF CHILDREN TO SESAME STREET
OR POLKA DOT DOOR

Television Show	Parent	Number of Pairs	r	P=.05
Sesame Street	father	12	0.2397	n.s.
Sesame Street	mother	15	-0.0745	n.s.
Polka Dot Door	father	12	0.1711	n.s.
Polka Dot Door	mother	14	0.1448	n.s.

TABLE 2:2 PEARSON PRODUCT-MOMENT CORRELATION BETWEEN MOTHER'S
AND FATHER'S POSITIVE RESPONSES ON SURVEY OF
PARENTAL ATTITUDE TOWARD TELEVISION

N = 27 r = 0.5765, significant at .005 level.

TABLE 2:3 PEARSON PRODUCT-MOMENT CORRELATIONS BETWEEN
QUANTITATIVE REACTIONS OF CHILDREN TO SESAME STREET
OR POLKA DOT DOOR WITH SCORES ON PEABODY PICTURE
VOCABULARY

Sesame Street	N = 18	r = +0.6422 significant at .005 level
Polka Dot Door	N = 15	r = -0.1699 not significant at .10 level

FIGURE 1: GRAPH OF MEAN VERBAL ENTHUSIASM SCORES

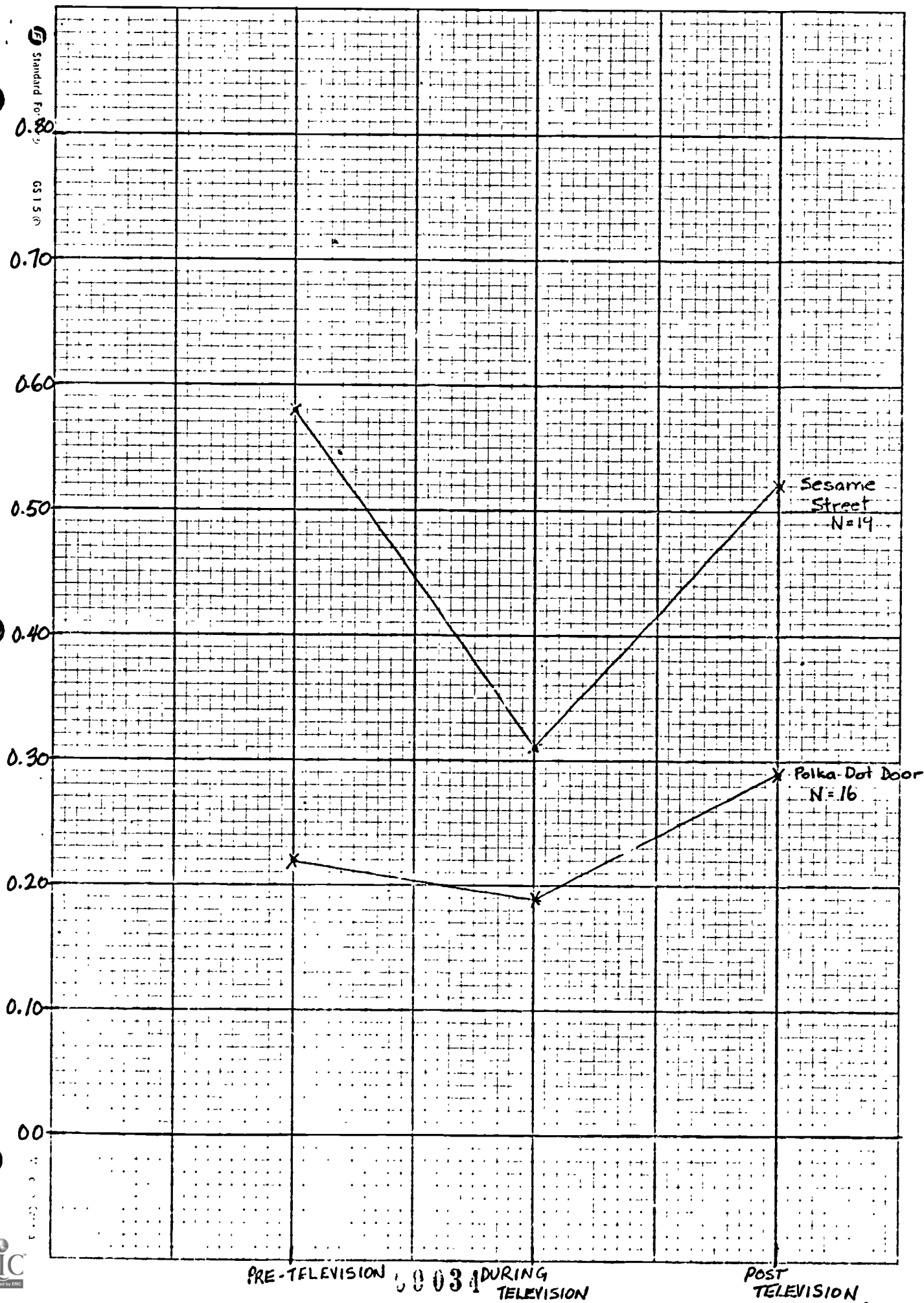
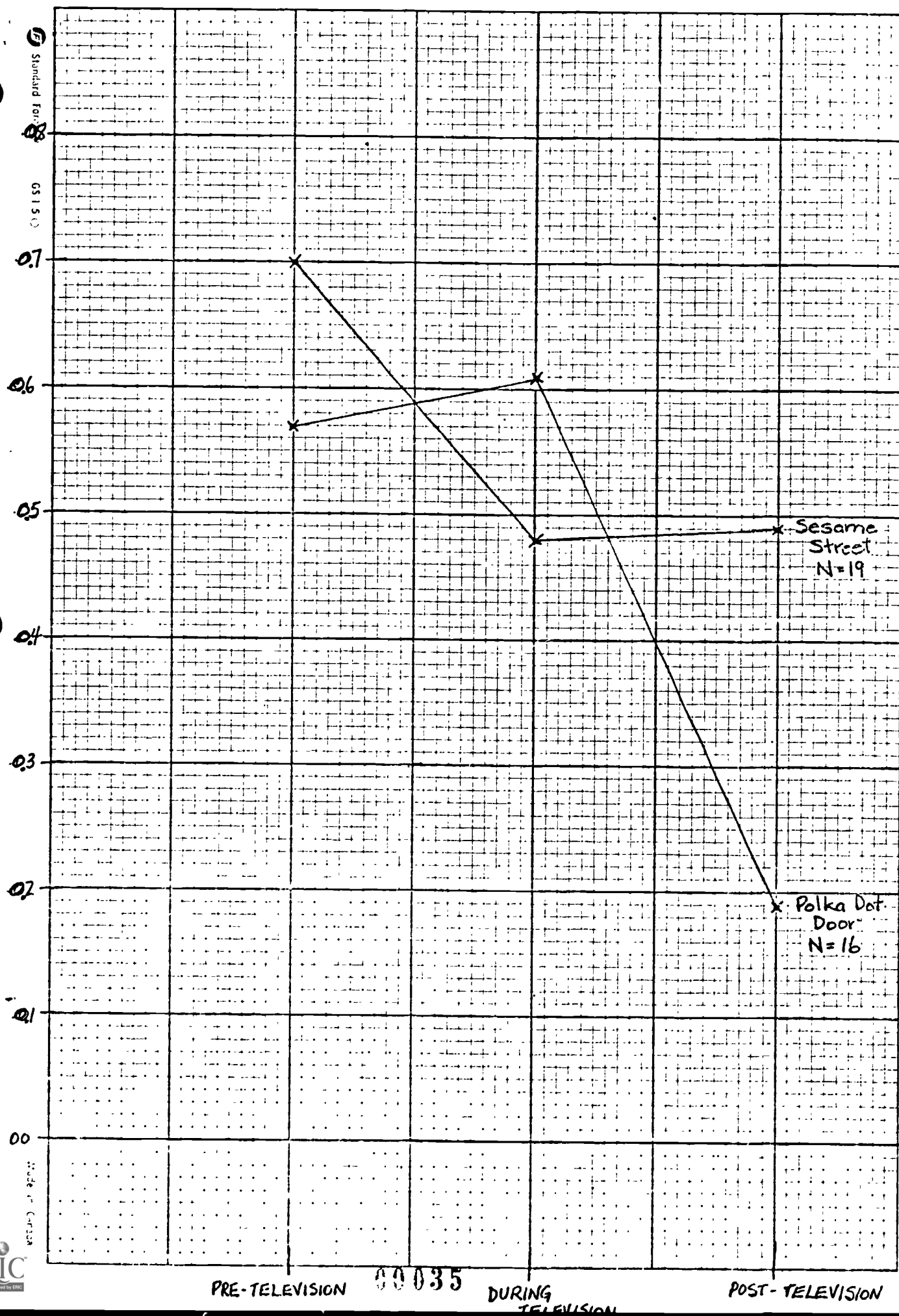


FIGURE 2: GRAPH OF MEAN NON-VERBAL ENTHUSIASM SCORES.



PRE-TELEVISION

00035

DURING
TELEVISION

POST-TELEVISION

FIGURE 3: GRAPH OF MEAN VERBAL NEGATIVE SCORES

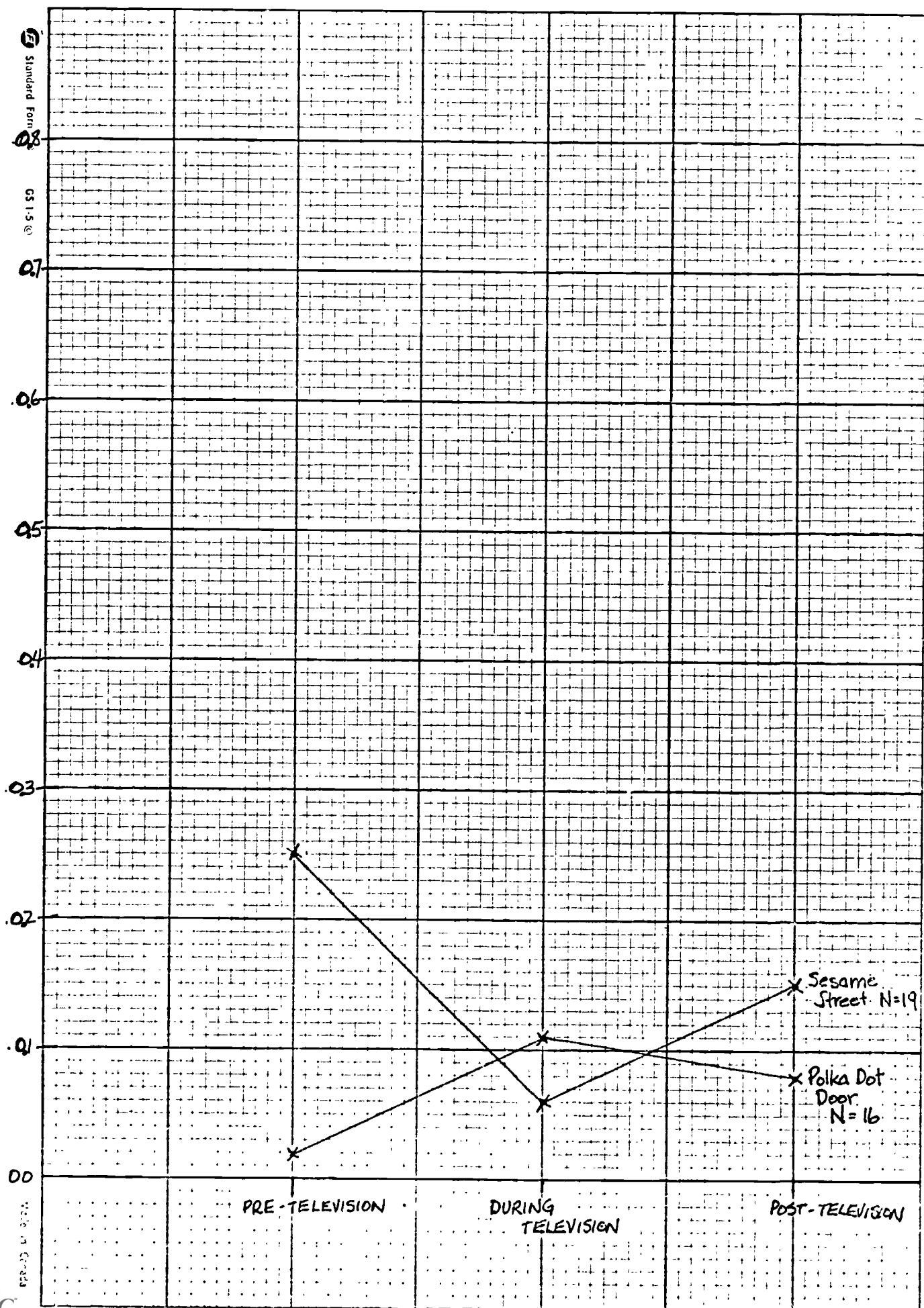


FIGURE 4: GRAPH OF MEAN NON-VERBAL NEGATIVE SCORES

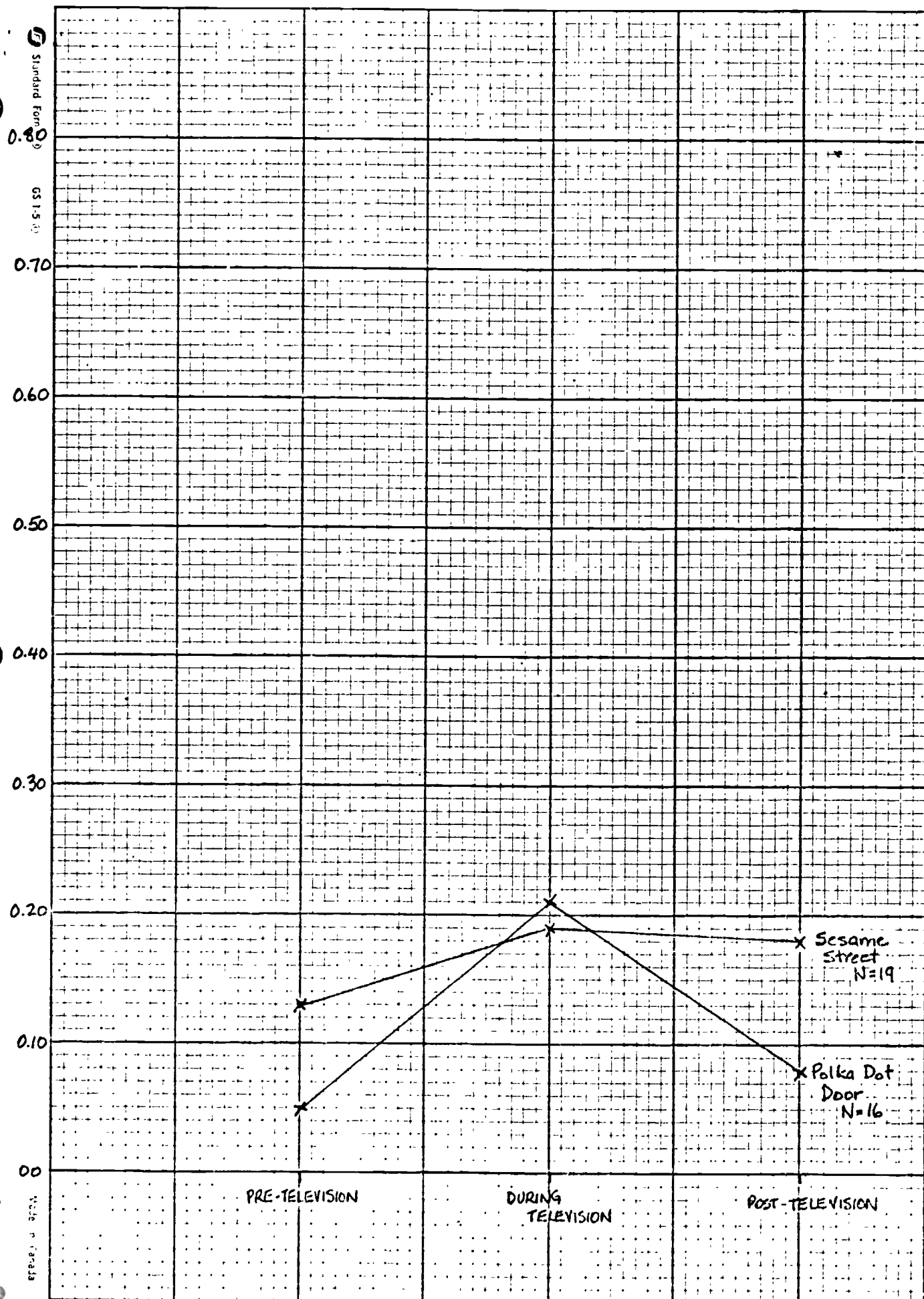


FIGURE 5: GRAPH OF MEAN CHILD INTERACTION SCORES

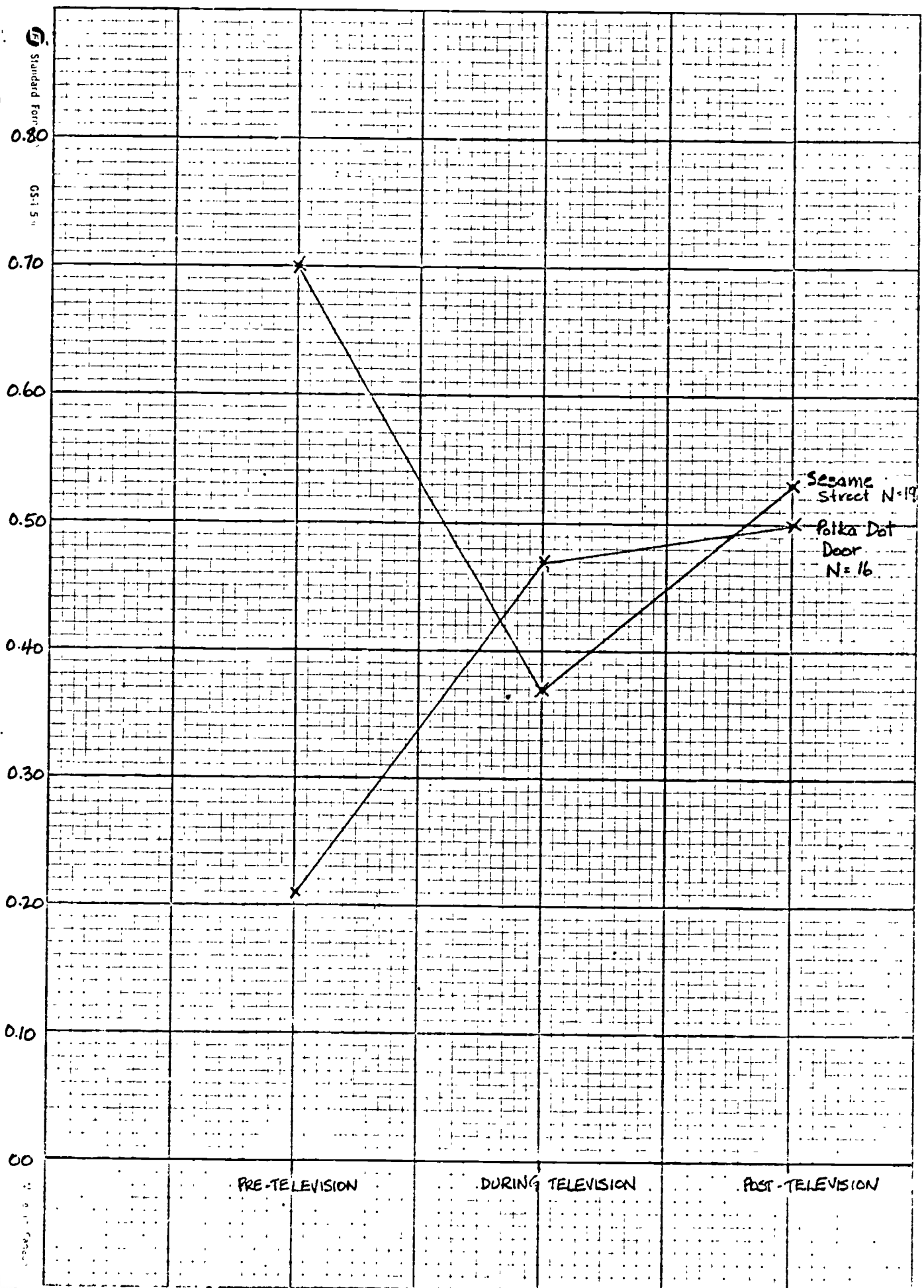
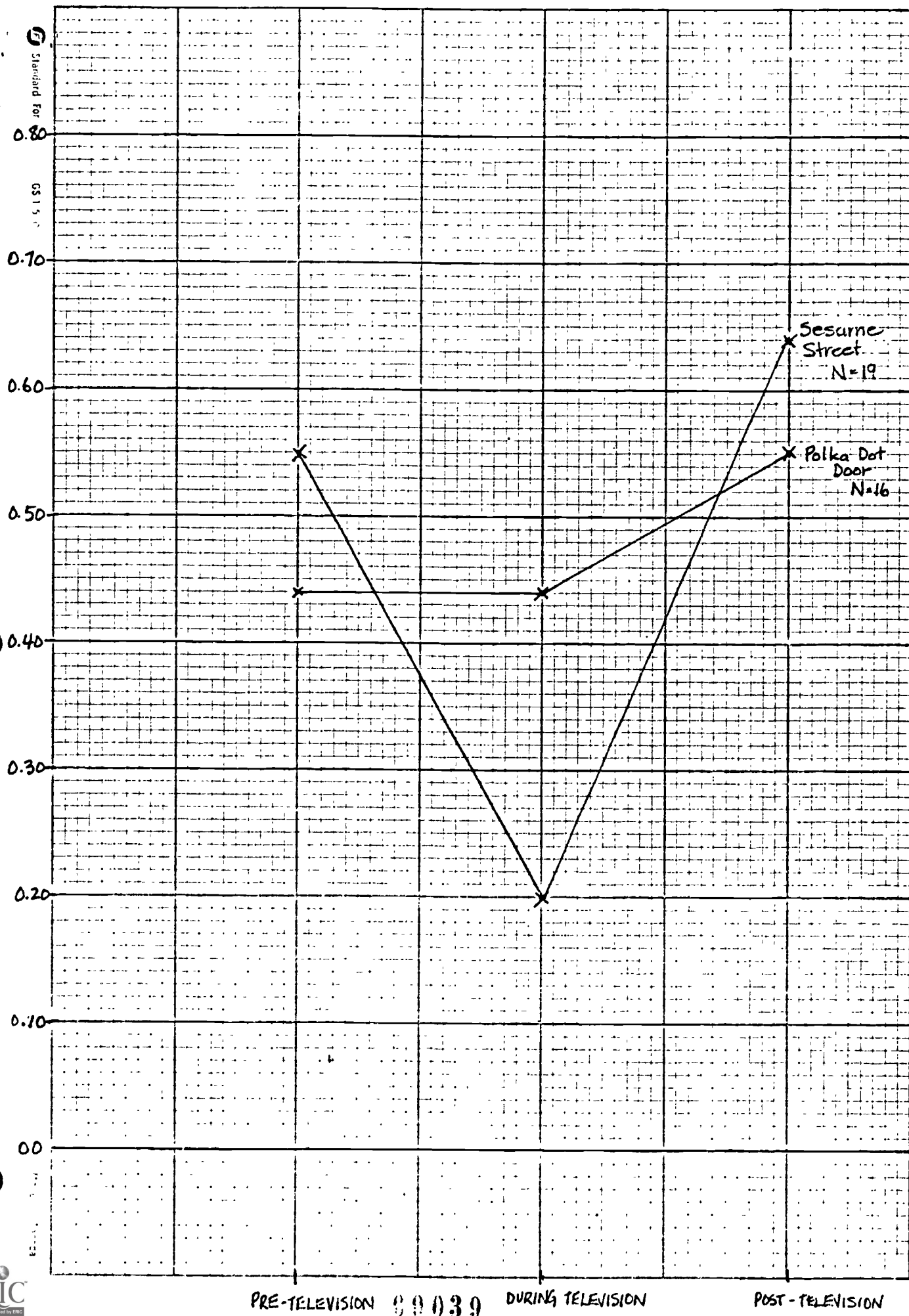


FIGURE 6: GRAPH OF MEAN TEACHER INTERACTION SCORES.



The analysis of responses on Survey of Parental Attitude Toward Television indicate many interesting findings. The majority of parents have the most knowledge of and positive feelings about "Sesame Street" with "Polka Dot Door" and "Mister Rogers" fairly evenly matched in second place. According to their parents reports most children learn from "Sesame Street" and "Polka Dot Door" and they also converse to their parents and respond actively to these shows. "Sesame Street" and "Polka Dot Door" are also the shows which the greatest proportion of parents enjoy watching. Parents responded most negatively to encouraging their children to watch, and to watching three or more times a week. (Tables 3:1, 3:2, 3:3)

Report of Acceptance or Rejection of Hypotheses

1) From results of this test children do show altered frequency in their individual and interactive behaviors when exposed to "Sesame Street" or "Polka Dot Door", however the effect of television is significant and creates a more parallel pattern across behaviors in the case of "Sesame Street". The hypothesis may be accepted in the case of "Sesame Street" but not for "Polka Dot Door".

2) Parents' positive attitudes toward television do not correlate significantly with children's overt reactions to "Polka Dot Door" or "Sesame Street". Thus the hypothesis that the more positive the parent's attitudes toward television are, the more quantitatively the child will react to the shows presented, must be rejected.

3) The significant correlation between the "Sesame Street" subjects' I.Q. scores and their overt reactions to the program lead to acceptance of the hypothesis that

the more intelligent the child is the more quantitatively he will react to the shows, in the case of "Sesame Street". This hypothesis must be rejected for "Polka Dot Door" since the correlations between I.Q. and subjects' overt reactions to "Polka Dot Door" were not significant.

PERCENTAGE OF MALE POPULATION RESPONDING TO ITEM
N=27

10. Are these television programs?

1. Have you ever seen these programs ?
2. Can you receive these programs ?
3. Do your children ever watch these programs ?
4. Do they watch these programs 3 or more times a week ?
5. Do you watch or sit in the room when they watch these programs ?
6. Do the children enjoy the programs ?
7. Do you enjoy the programs ?
8. Do your children learn from the programs ?
9. Are these programs good for your children ?
10. Do you encourage your children to watch ?
11. Do your children talk to you about these programs ?
12. Do your children actively respond to these shows ? (for example, sing along, answer questions, laugh at

MISTER ROGERS			CAPTAIN KANGAROO			ROMPER ROOM			POLKA DOT DOOR			SESAME STREET		
Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know
X			X			X			X			X		
77 78	23 22	0 00	55 56	25 93	18 52	51 85	33 33	14 81	74 07	22 22	3 70	60 00	0 00	0 00
77 78	37 01	18 52	77 78	3 70	18 52	88 89	0 00	1	71 48	0 00	18 52	60 00	0 00	0 00
77 78	7 41	14 81	51 85	25 93	22 22	70 37	11 11	18 52	77 78	0 00	22 22	60 00	0 00	0 00
29 63	29 63	40 74	7 41	44 44	48 15	18 52	40 74	40 74	37 04	29 63	33 33	77 78	7 41	14 81
44 44	44 44	11 11	22 22	62 96	14 81	18 52	62 96	18 52	48 15	40 74	11 11	74 07	22 22	3 70
7 41	25 93		29 63	25 93	44 44	33 33	22 22	44 44	66 67	0 00	33 33	60 00	0 00	0 00
25 93	33 33	40 74	0 00	40 74	59 26	3 70	40 74	55 56	25 93	25 93	48 15	85 89	3 70	11 11
7 41	33 33		25 93	22 22	51 85	25 93	14 81	59 26	55 56	0 00	44 44	60 00	0 00	0 00
3 70	29 63		22 22	7 41	70 37	22 22	14 81	51 85	48 15	0 00	51 85	60 00	0 00	3 70
40 74	48 15	11 11	44 81	62 96	22 22	11 11	70 37	18 52	29 63	59 26	11 11	62 96	33 33	3 70
55 56	29 63	14 81	29 63	40 74	29 63	25 93	48 15	25 93	44 44	40 74	14 81	92 59	0 00	7 41
55 56	7 41	37 04	25 93	18 52	55 56	25 93	18 52	55 56	48 15	11 11	40 74	88 89	0 00	11 11

13. Do your children ask to watch these programs ?
14. Do your children have books, toys, games, or puppets which are modelled for characters in these programs ?
15. To your knowledge, do your children repeat songs, stories, jokes, or actions from these programs in their play ?

MISTER ROGERS	CAPTAIN KANGAROO	BOMPER BOOM	POLKA DOT DOOR	SESAME STREET
Yes	Yes	Yes	Yes	Yes
No	No	No	No	No
Don't Know	Don't Know	Don't Know	Don't Know	Don't Know
25.93 25.93	22.32 29.63 48.15	51.85 44.44	44.44 25.93 29.63	92.59 3.70 3.70
74.07 18.52	3.70 66.67 29.63	18.52 55.52 25.93	0.00 77.78 22.22	88.89 7.41 3.70
29.63 29.63 40.74	3.70 48.15 48.15	3.70 40.74 55.52	44.44 14.81 40.74	88.89 0.00 11.11

THE REST OF THE INFORMATION WILL DEAL WITH CHILDREN BETWEEN THE AGES OF 3 AND 6.

TABLE 3.2. PERCENTAGE OF FEMALE POPULATION RESPONDING TO ITEMS N=3

MISTER ROGERS	CAPTAIN KANGAROO		ROMPER ROOM		POLTA DOT DOOR		SESAME STREET	
Yes No	Yes No	Don't Know	Yes No	Don't Know	Yes No	Don't Know	Yes No	Don't Know
X	X		X		X		X	
81.25 15.63 3.13	84.38 15.63 0.00	93.75 3.13 3.13	78.13 18.75 3.13	96.88 0.00 3.13	96.88 0.00 3.13	96.88 0.00 3.13	96.88 0.00 3.13	96.88 0.00 3.13
84.38 6.25 9.38	84.38 6.25 9.38	96.88 3.13 0.00	96.88 3.13 0.00	96.88 3.13 0.00	96.88 3.13 0.00	96.88 3.13 0.00	96.88 3.13 0.00	96.88 3.13 0.00
75.00 18.75 6.25	50.00 46.88 3.13	78.13 12.50 9.38	78.13 12.50 9.38	96.88 0.00 3.13	96.88 0.00 3.13	96.88 0.00 3.13	96.88 0.00 3.13	96.88 0.00 3.13
78.75 68.75 12.50	3.13 93.75 3.13	6.25 96.88 3.13	6.25 96.88 3.13	43.75 53.13 3.13	43.75 53.13 3.13	43.75 53.13 3.13	43.75 53.13 3.13	43.75 53.13 3.13
50.00 50.00 0.00	71.88 0.00 0.00	40.63 59.38 0.00	40.63 59.38 0.00	59.38 40.63 0.00	59.38 40.63 0.00	59.38 40.63 0.00	59.38 40.63 0.00	59.38 40.63 0.00
62.50 28.13 9.38	25.00 37.50 37.50	37.50 31.25 31.25	37.50 31.25 31.25	75.00 6.25 18.75	75.00 6.25 18.75	75.00 6.25 18.75	75.00 6.25 18.75	75.00 6.25 18.75
46.88 18.75 34.38	40.63 37.50 21.88	62.50 15.63 21.88	62.50 15.63 21.88	73.13 15.63 11.25	73.13 15.63 11.25	73.13 15.63 11.25	73.13 15.63 11.25	73.13 15.63 11.25
56.25 25.00 18.75	31.25 46.88 21.88	31.25 37.50 31.25	31.25 37.50 31.25	65.63 15.63 18.75	65.63 15.63 18.75	65.63 15.63 18.75	65.63 15.63 18.75	65.63 15.63 18.75
59.38 9.38 31.25	15.63 50.00 34.38	37.50 21.88 40.63	37.50 21.88 40.63	62.50 6.25 31.25	62.50 6.25 31.25	62.50 6.25 31.25	62.50 6.25 31.25	62.50 6.25 31.25
62.50 6.25 31.25	12.50 68.75 18.75	6.25 87.50 6.25	6.25 87.50 6.25	37.50 53.13 9.38	37.50 53.13 9.38	37.50 53.13 9.38	37.50 53.13 9.38	37.50 53.13 9.38
53.13 37.50 9.38	18.75 65.63 15.63	28.13 65.63 6.25	28.13 65.63 6.25	56.25 34.38 9.38	56.25 34.38 9.38	56.25 34.38 9.38	56.25 34.38 9.38	56.25 34.38 9.38
56.25 25.00 18.75	37.50 37.50 25.00	34.38 34.38 31.25	34.38 34.38 31.25	68.75 12.50 18.75	68.75 12.50 18.75	68.75 12.50 18.75	68.75 12.50 18.75	68.75 12.50 18.75

Example:

0. Are these television programs ?

1. Have you ever seen these programs ?
2. Can you receive these programs ?
3. Do your children ever watch these programs ?
4. Do they watch these programs 3 or more times a week ?
5. Do you watch or sit in the room when they watch these programs ?
6. Do the children enjoy the programs ?
7. Do you enjoy the programs ?
8. Do your children learn from the programs ?
9. Are these programs good for your children ?
10. Do you encourage your children to watch ?
11. Do your children talk to you about these programs ?
12. Do your children actively respond to these shows ? (for example, sing along, answer questions, laugh at

13. Do your children ask to watch these programs ?
14. Do your children have brooks, toys, games, or puppets which are modelled from characters in these programs ?
15. To your knowledge, do your children repeat songs, stories, jokes, or actions from these programs in their play ?

MISTER ROGERS			CAPTAIN KANGAROO			BOMPER ROOM			POLKA DOT DOOR			SESAME STREET		
Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know
46.63	46.88	12.50	9.38	81.25	9.38	6.25	87.50	6.25	67.50	34.38	3.13	96.88	3.13	0.00
6.25	84.38	9.38	0.00	90.63	9.38	6.25	59.38	6.25	3.13	84.38	12.50	9.38	6.25	0.00
37.50	21.88		3.13	65.63	31.25	18.75	68.75	12.50	46.63	46.63	18.75	9.38	0.00	3.13

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1. Have you ever seen these programs ?

3. Do your children ever watch these programs ?

5. Do you watch or sit in the room when they watch these programs ?

7. Do you enjoy the programs ?

9. Are these programs good for your children ?

11. Do your children talk to you about these programs?

2. Do your children actively respond to these shows? (for example, sing along, answer questions, laugh at jokes)

13. Do your children ask to watch these programs ?
14. Do your children have books, toys, games, or puppets which are modelled from characters in these programs ?
15. To your knowledge, do your children repeat songs, stories, jokes, or actions from these programs in their play ?

MISTER ROGERS	CAPTAIN KANGAROO	ROMPER ROOM	POLKA DOT DOOR	SESAME STREET
Yes	Yes	Yes	Yes	Yes
No	No	No	No	No
Don't Know	Don't Know	Don't Know	Don't Know	Don't Know
44.87 37.21 18.64 15.25 57.63 27.12		5.08 7.19 23.73	54.24 30.51 15.25	94.92 3.39 1.69
6.78 79.66 13.56 1.69 79.66 18.64		27.12 57.63 15.25	1.69 81.36 16.95	94.51 6.78 1.69
35.59 33.90 30.51 3.39 57.63 38.98		11.86 55.93 33.20	42.37 28.81 28.81	93.74 0.00 6.78

CHAPTER V

SUMMARY AND RECOMMENDATIONS

Purpose

The purpose of this study was to compare preschool children's behavior before, during and after the viewing of two one-half-hour television programs, "Sesame Street" and "Polka Dot Door". Using questionnaires to obtain parents' attitudes to five preschool television programs, and Peabody Picture Vocabulary Test scores of the children's intelligence, an attempt was made to determine whether or not parents' attitudes and children's intelligence affect children's reactions to television programs.

Subjects

The children in the Family Studies Preschool at the University of Guelph, who ranged in age from 3 years, 6 months to 5 years, 2 months, were employed as subjects in this experiment. The morning and the afternoon children were each randomly assigned to a "Polka Dot Door" group or a "Sesame Street" group. The morning and afternoon groups were then analysed together by show, with 16 subjects in the "Polka Dot Door" group and 19 subjects in the "Sesame Street" group.

Mothers and fathers of the preschool children in the study were asked to complete the Survey of Parental Attitudes Toward Television. Of the 73 questionnaires sent out, 59 were returned.

Procedure

Television monitors and videotape recording equipment were set up in two rooms of the Preschool on the test

day. After approximately one hour of free play the children were asked to go to one of these rooms for a television program. The camera monitors were turned on and observations were recorded for ten minutes at which time "Polka Dot Door" was turned on in one room and "Sesame Street" in the other. After one-half-hour the televisions went off and the camera monitoring and observations continued for a further twenty minutes.

A Survey of Parental Attitude Toward Television was sent out to each mother and each father of a child registered in the Preschool.

Findings

1) The effect of television is significant and creates a more parallel pattern across the six behavior variables in the case of "Sesame Street" than it does for "Polka Dot Door". The hypothesis that frequency of behavior will be altered due to the presence of the television may be accepted for "Sesame Street" but must be rejected for "Polka Dot Door".

2) The hypothesis that the more positive the parent's attitudes toward television are, the more quantitatively the child will react to the television presented, was rejected.

3) The hypothesis that the more intelligent the child is, the more quantitatively he will react to the television was accepted for "Sesame Street" but rejected for "Polka Dot Door".

Recommendations

Although attempts were made in this study to increase reliability of observers by exposing them to the test utensils and conditions, the variance between observers

was probably fairly high. To overcome this I would suggest that future research focus on a smaller group of children and be carried on for shorter time periods over several weeks. Using a maximum of five research assistants, a more specific behavior checklist, and several test sessions, the observer variability would be greatly decreased.

The presence of the television in the Preschool was a hindrance to normal play behavior. Future tests could more accurately assess the influence of television on children's play and children's incorporation of concepts gleaned from television, by placing specific toys, books or puppets in the Preschool and observing the children's attention to, and use of these. The "Sesame Street" props would be available tools, however ones which relate to other shows might be readily produced.

Videotapes could be made of such common Preschool activities as using a brace and bit, finding a solution to a dispute, putting a certain puzzle together, or acting out a story with felt characters. The influence of the videotape could then be noted from future attention to and play surrounding such activities.

There are many ways to attempt to observe a child's play and use of concepts and it seems that a preschool situation would be an interesting place to explore children's accommodation of feelings, behavior, thoughts or concepts related to television viewing.

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APPENDIX A
CONTENT OF VIDEOTAPED PROGRAMS
"POLKA DOT DOOR"
AND
"SESAME STREET"
AND
CHILDREN'S COMMENTS

CONTENT OF VIDEOTAPED PROGRAMS

SEGMENT	MINUTES	TYPE OF PRESENTATION
"Polka Dot Door"		
1	00	Song Introduction
2	01	2 Adults Guess what Drawing Is
3	07	2 Adults Sing Along & Motions
4	08	Film Boat Building, Launching
5	11	Movements in building a boat
6	12	Telling time
7	13	Story "Summer Folk"
8	24	Adults and stuffed animals on boat
9	27	Film, music and poem about a river

"Sesame Street" (one-half-hour segment of Canadian version)

1	00	Big Bird - bored
2	03	Letter N
3	04	Animation - Nancy Nanny Goat
4	05	Big Bird - help fix bike
5	07	Animation - 1,2,3
6	08	Film of ball on roller coaster 1,2,3
7	09	Children playing in snow
8	10	Big Bird - getting tool box
9	13	Animation - letter N
10	14	Animation of School
11	15	Big Bird - key for tool box
12	16	Puppets Bert and Ernie Sickness
13	20	Film Magician - Dancer 1,2,3.
14	22	Animation of Letter G
15	23	Film - Letters in Street Signs
16	25	Film - Jet making letter in sky
17	26	Puppets Monster reading sign
18	28	Film - Fishing boat-narrated by boy

CHILDREN'S COMMENTS

Morning "Sesame Street"

"Sesame Street!"

"I can't hear it."

(laughter)

"Looks li' a airplane right?"

"That's better."

"Ernie says hi y'ol' TV."

"A balloon."

"Hi big bird!"

"Big Bird is going to get something to do."

"What's he going to get to do?"

"He's going to help Louis. Oh."

"Man" (along with professor)

Nancy

"...nails."

paper

"N."

(airplanes)

"N!"

flying across the room

"screwdriver"

"Oh I saw this. I saw this."

ball and
wheels

"This is my Mom's favorite."

"1,2,3."

"1,2,3."

"snow!"

(playing with store money)

Big Bird "I'm tired too."

"I wanna sleep with you."

Ernie and Bert "They're puppets I betcha."

"He doesn't know anything" (laughing)

(laughing) "No heart sounds like that."

"When's snack?"

G "That's what my name tag says!"

"G,A,D,B,D,E,F,H,G,E,I,J,K,"

(guess then reinforced or corrected by TV)

sky rocket "F, N, H, He's going to make H"

"M,"

"Monsters don't go to school!"

"Cause they all look the same right?"

boat "What is it?"

"It's gonna be a big big fish."

"No it's gonna be a whaler."

"You stupid there's no children in the ocean only on
the sand to drink the water!"

CHILDREN'S COMMENTS

Afternoon "Sesame Street"

"Bye Big Bird."

Big Bird	"I remember this."	playing with groceries
	"We got something to do - watch you."	
	"My daddy has a colour TV"	
	"Hee Hee Hee He thinks there's nothing to do on Sesame Street."	

letter N.	"N naw."
Nancy	"Yuch"
	"I don't know why she bites her nails."
	"Sure looks funny eh?"

N words	
Big Bird	"There's something to do on Sesame Street."

1,2,3	"1,2,3."
wheel	"I like this - it's a ball doing tricks. It makes things go round - you watch, see?"

snow	"1,2,3."
	"Could you come with me to get a drink of water?" (groceries)

Big Bird	"It doesn't look like his garage to me."
----------	--

letter on street	(groceries)
------------------	-------------

school

Big Bird

Ernie & Bert

signs	children call out letters
-------	---------------------------

jet	children guess letter he is writing
-----	-------------------------------------

Monster ship	"Monster school."
--------------	-------------------

CHILDREN'S COMMENTS

Morning "Polka Dot Door"

"I watch this all the time."

"That's Polka Dot Door."

"I watch it a lot at night time." 5 children
puzzle, picture, discussion of earrings
teacher's ging - children don't

"There's the magic door, I know the Polka Dot song."

"It takes a long time to be over."

"Don't look at the puzzle look at the Polka Dot Door."

"That's a big big big boat."

No response to invitations to move.

"See the story clock, you know that it's time for story."

"He's going to read a story to us."

squirming through story and talking

"I saw this before."

no laughter at Polka Roo

"There's water. Watch Polka Dot Door."

"It's over."

Brady Bunch
Flintstones
Sesame Street

favorite shows when children asked by
teacher

CHILDREN'S COMMENTS

Afternoon "Polka Dot Door"

"Polka Dot Door."

"It's my favorite. I didn't watch it this morning."

"I love it."

"I saw it. I saw some trees."

(invisible picture)

"It's sort of like a record see?"

(no response to questions)

"Why it is a record. It's a record

talking about videotape

that plays itself."

machine)

"No that's not a record. It's a photograph."

"I told you I saw some trees."

"He's using his magic..."

"I'm not going to sing."

"Hey teacher are we going to another thing?"

"I still know that one." (song?)

(no singing)

"I learn from my - What do people do all day"

(I believe this is a book)

"A ducky."

"They know how to make big boats."

"I didn't wonder how they made boats - I have it in my book."

"I know what ribs are ..." (explains)

"It's a house boat see?"

"Yeah, It's finished. Maybe it's a different kind."

"That's a houseboat, No that is."

(imitation of hammering)

ugh - ugh (not bending wood but making sound)

(laugh at sounds in story)

(conversation unrelated to TV)

"Hey look summerfolk."

"I've got a strange feeling that we're in danger."

"What are having for snack." (related to mention of food in TV)

"I know this story - I've seen this one before."

"Blow the man down" (singing)

(down to 1 child paying attention)

"I think we have 7 80 more minutes."

"Row the boat ashore" (rowing and singing)

"A he u u yuh." (repeated again and again)

(fight)

"It's stopped now."

"We gonna watch anything else?"

Teacher asked about story - children answered that it was about boats, bulldozer, silly people - Eskimos.

APPENDIX B
OBSERVATION CHECKLIST OF CHILD'S BEHAVIOR

00063

OBSERVATION CHECKLIST

PROGRAM _____

OBSERVER _____

A.M.

P.M.

CHILD _____

SEGMENT	ENHANCING A.D.M.		NEGATIVE RESPONSE		INTERACTION	
	VERBAL	NON-VERBAL	VERBAL	NON-VERBAL	CHILD	TEACHER
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

OBSERVATION CHECKLIST

PROGRAM _____

OBSERVER _____

A.M.

P.M.

CHILD _____

SEGMENT	ENVIRONMENTAL		NEGATIVE RESPONSE		INTERACTION	
	VERBAL	NON-VERBAL	VERBAL	NON-VERBAL	CHILD	TEACHER
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
53						
54						

OBSERVATION CHECKLIST

PROGRAM _____

OBSERVER _____

A.M.

P.M.

CHILD _____

SEGMENT	INITIALS ADM		NEGATIVE RESPONSE		INTERACTION	
	VERBAL	NON-VERBAL	VERBAL	NON-VERBAL	CHILD	TEACHER
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						

OBSERVATION CHECKLIST

PROGRAM _____

OBSERVER _____

A M

P M

CHILD _____

SEGMENT	EMOTIONAL ADM		NEGATIVE RESPONSE		INTERACTION	
	VERBAL	NON-VERBAL	VERBAL	NON-VERBAL	CHILD	TEACHER
82						
83						
84						
85						
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						
96						
97						
98						
99						
100						
101						
102						
103						
104						
105						
106						
107						
108						

OBSERVATION CHECKLIST

PROGRAM

OBSERVE

A 12

P. M.

Child

[illegible]

APPENDIX C

GRAPHS OF 5 MINUTE TRIAL

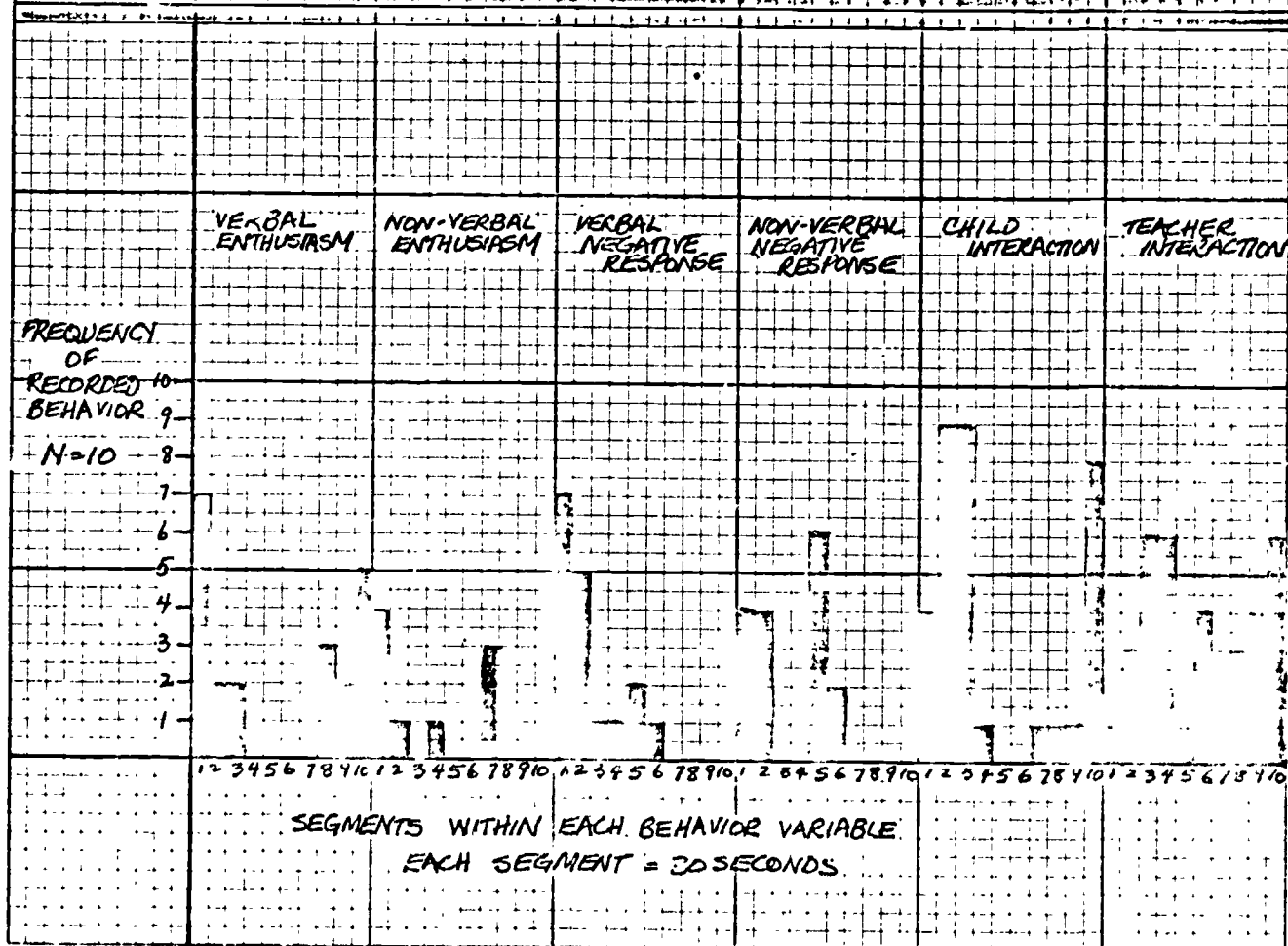
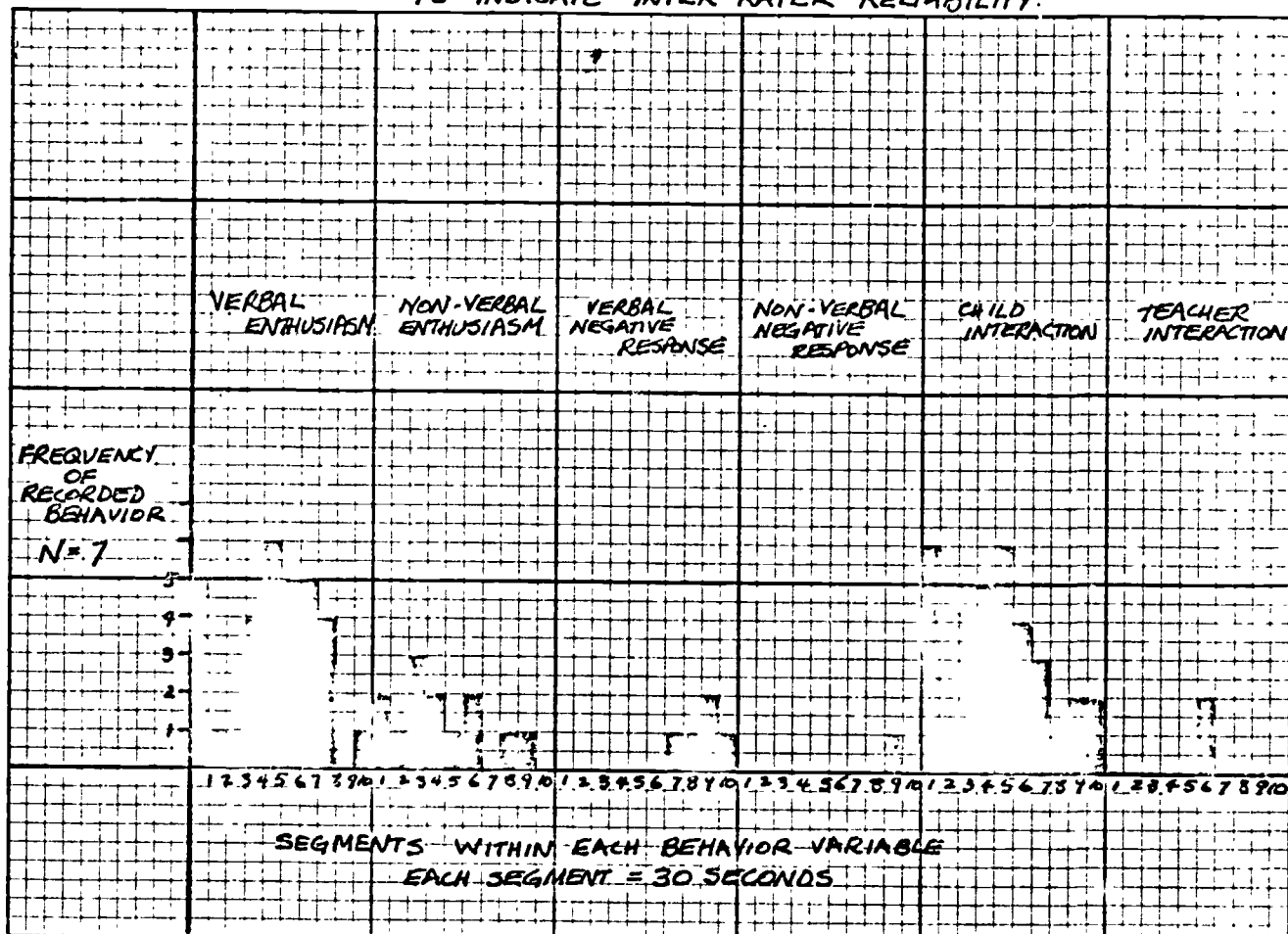
OBSERVATIONS OF ONE CHILD TO

INDICATE INTER-RATER RELIABILITY

APPENDIX B: GRAPHS OF 5 MINUTE TRIAL OBSERVATIONS OF ONE CHILD TO INDICATE INTER-RATER RELIABILITY.

Standard Forms ©

GS-1-5 (7)



Made in Canada

APPENDIX D
INSTRUCTIONS TO OBSERVERS

APPENDIX D : INSTRUCTIONS TO OBSERVERS.

27 Vardon Drive,
Guelph :1G 1W8.
February 5, 1974.

Dear

Thank you very much for offering to observe the reactions of preschool children to television on Tuesday, February 12th 1974. We shall commence the observation at 10:00 A.M. and 2:00 P.M. employing the initial 10 minutes as baseline records of the children's behavior. At 10:10 and 2:10 the half-hour television videotapes will be put into operation. Once the television programmes have concluded it will be necessary to continue recording the children's behavior for the final twenty minutes of the session. This is to determine the effects of the programmes.

Enclosed is a sample Observation Checklist. The time intervals will be thirty seconds in duration marked by a signal from a designated timer in the booth. Each behavior occurring within a given thirty second time interval should be recorded once per interval. The categories are as follows:

Verbal enthusiasm includes laughing, singing or statements such as "I like this."

Non-Verbal Enthusiasm behavior such as smiling, moving to the music, etc.

Verbal Negative Response covers negative exclamations such as "I don't like this."

Non-Verbal Negative Response behavior such as frowning, crying, etc.

Interaction covers actions or conversations with others, either initiated by the child or the other person, child or teacher.

Please report to the Observation Booth of the at 9:55, Tuesday, February 12th to record the behavior of

If you have any questions, please contact me as soon as possible at 821-9132. Thank you for your co-operation. See you on February 12th!

Sincerely,

Laurie Ball

APPENDIX E
INSTRUCTIONS TO TEACHERS

RESEARCH ON PRESCHOOL TELEVISION PROGRAMS

TUESDAY, FEBRUARY 12, 1974

SCHEDULE FOR TELEVISION OPERATION:

- | | |
|-------|---|
| 10:00 | -children are to go to yellow and red rooms |
| 2:00 | according to the lists posted in these rooms. |
| | -observers will begin recording behavior to establish the child's baseline. |
| 10:10 | -televisions will be turned on. |
| 2:10 | |
| 10:40 | -television programs will conclude |
| 2:40 | -discussions and snack may begin |
| 11:00 | -observation and camera monitoring will end. |
| 3:00 | -regular activities may resume. |

TELEVISION EQUIPMENT:

- will be located in the Yellow and Red Rooms, and in the kitchen.
- (a) camera monitors above televisions should be explained to children as part of the equipment necessary to show television in the Preschool, if they ask.
- (b) the technician operating the equipment may walk through the rooms and talk to the children so that they will know who is operating the equipment.
- (c) children may not play with any of the knobs and teachers should only adjust volume if necessary.

PREPARATION:

- (a) at 10:00 and 2:00 children should be taken to the rooms where their names are listed, accompanied by two teachers.
- (b) doors to the Yellow and Red Rooms must be shut and children told that in a few minutes they will be able to watch a television show - please explain to them that they need to stay in the room after the program - snack will be served in that room.

- (c) children may be told that there is another television in the other room because all of the children in the Nursery School would be unable to see one television at the same time.
- (d) other than asking children to sit down if they are blocking the view of others, refrain from giving directions to the children during the program.
- (e) if children wander off during the program that is fine, but let them know that they may not leave the room. - perhaps they could visit the washroom before 10:00 and 2:00.
- (f) there will be marks on the floor to indicate the camera field - if children sit outside this area suggest that they move to a better viewing position within the camera monitor's range.

AT THE CONCLUSION OF TELEVISION PROGRAMS:

- (a) at 10:40 and 2:40, programs will end and snack tables can be set up inside the camera monitored area.
- (b) please have snack trays ready in B15 or B53 as the kitchen will be full of equipment and the booths full of observers.
- (c) at snack the children may talk about television or act out things that they have seen - please be interested but try not to express positive or negative opinions yourselves.
- (d) you may ask questions and carry on as you normally would in discussing group or an activity.
- (e) at 11:00 and 3:00 children may leave snack and carry on with their normal activities.

APPENDIX F
LETTER TO PARENTS

00076

APPENDIX

27 Vardon Drive,
Guelph N1G 1W8, Ontario.
February 5, 1974.

Dear

Television is a major influence in our lives whether we like to admit it or not. Many parents, educators, psychologists and media people speculate about the effects of television on young children but at this point no one is sure what or how children learn from it.

In order to carry out an investigation of the children's reactions to television programs I need your help. There will be one half-hour of television shown in the Family Studies Preschool on Tuesday, February 12th, to determine the effect of different types of programming on the attention and behavior of preschool children. The Parent Attitude questionnaires enclosed are intended to provide a broader understanding of the children's and family's reactions to television than would be possible in one brief television viewing.

Two questionnaires, one for father's answers and one for mother's, and a stamped, addressed envelope are enclosed. Please check off the responses most descriptive of your preschool child's television viewing and mail them in the envelope provided. Children and families will not be identified in the study.

Your assistance is greatly appreciated.

Sincerely,

Laurie Ball

Laurie Ball
4th year Child Studies Major
College of Family and Consumer
Studies

Advisor, Professor L. Masters

00077

APPENDIX G

SURVEY OF PARENTAL ATTITUDES TOWARD TELEVISION.

SURVEY OF PARENTAL ATTITUDE TOWARD TELEVISION

for 21-491

RESEARCH IN CHILD STUDIES - Laurie Ball

Place an "X" in the proper box.

Example:

0. Are you a parent ? Yes X No

1. Do you have television ? Yes No
(If no stop here)
2. Do you have colour television ? Yes No
3. Is your television connected to cable ? Yes No

Information About Your Children

Example: If your child is a son 3 years old, you would mark:

0. Boy X Girl Age 3

- | | | | |
|----|-----------------|------------------|-----------------|
| 1. | Boy <u> </u> | Girl <u> </u> | Age <u> </u> |
| 2. | Boy <u> </u> | Girl <u> </u> | Age <u> </u> |
| 3. | Boy <u> </u> | Girl <u> </u> | Age <u> </u> |
| 4. | Boy <u> </u> | Girl <u> </u> | Age <u> </u> |
| 5. | Boy <u> </u> | Girl <u> </u> | Age <u> </u> |
| 6. | Boy <u> </u> | Girl <u> </u> | Age <u> </u> |
| 7. | Boy <u> </u> | Girl <u> </u> | Age <u> </u> |

00079

Example:

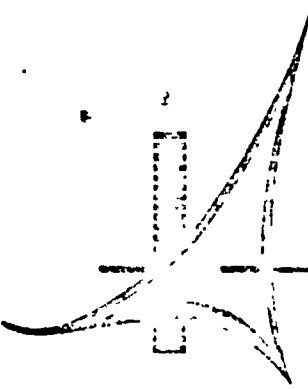
- 00030

Don't Know

13. Do your children ask to watch these programs ?
14. Do your children have books, toys, games, or puppets which are modelled from characters in these programs ?
15. To our knowledge, do your children repeat songs, stories, jokes, or actions from these programs in their play ?

MISTER ROGERS			CAPTAIN KANGAROO			ROMPER ROOM			POLKA DOT DOOR			SESAME STREET		
Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know

APPENDIX H
PERMISSION TO USE
SURVEY OF PARENTAL ATTITUDES TOWARD TELEVISION



APPALACHIAN

RESEARCH LABORATORY, INC.

P. O. BOX 1343
CHARLESTON, WEST VIRGINIA 25325

304/344-8371

November 5, 1973

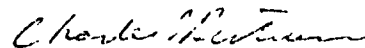
Ms. Laurie Ball
27 Vardon Drive
Guelph
Ontario, Canada

Dear Ms. Ball:

In response to your request of October 29, you have permission to use the questionnaire in the report entitled "A Comparison of Parents' Attitudes toward AEL's "Around the Bend" and Other Children's Television Programs". I would appreciate a copy of your study when completed since it might serve as partial validation of our questionnaire.

I am also enclosing a copy of a more recent study entitled Children's Reactions to Types of Television for your consideration.

Sincerely,



Charles L. Bertram
Director
Research and Evaluation

CLB/fjm

Enclosure